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Agriculture.



FALL GRAIN CATALOG

1940



SEASON

COKER'S PEDIGREED SEED COMPANY
HARTSVILLE, S. C.

OUR OPPORTUNITY—

By GEO. J. WILDS, President

THE South must find and use supplementary money crops since her acreages of cotton and tobacco have been necessarily curtailed. **THIS NECESSITY CAN BE OUR SALVATION.**

The great need of the South has been for a diversified agricultural program; a program that would keep our labor, stock and equipment gainfully employed throughout the year.

Not only must we supplement and distribute our income but we must cut down our expenses. This can be done by adopting a “live-at-home” program and this can be made easy by intelligent diversification.

“We are taking millions of acres out of the production of cotton and tobacco. Can we use it more profitably than by planting a large portion in oats and wheat followed by forage crops of legumes?”—
Aug., 1938.

DAVID R. COKER (1870-1938)
Founder

COKER'S PEDIGREED SEED COMPANY

crop; 2nd year, corn interplanted with summer legumes; 3rd year, oats or wheat followed by soybeans, cowpeas or lespedeza, and this followed with a winter cover crop. This rotation is safe and sound and if followed will also build up the organic content of our soils and increase their productivity.

But under the present control program not all of us can plant one-third of our open acres in cotton. What must we do with other acres? Corn, oats, legumes, truck crops (when soils adapted and markets available); some in pasture, poorest area in cropland or trees.

ADAPTED CROPS AVAILABLE

We have the adapted crops that fit into such a diversified program; such as oats, wheat, lespedeza, soybeans, cowpeas, etc. We should use those crops with which we are familiar until new crops have proven their worth and adaptability.

A RECOMMENDED ROTATION

A highly recommended rotation into which these crops fit is the following: 1st year, cotton, followed by winter cover

INCREASED YIELDS NECESSARY

Many of our good farmers have adopted such a rotation and land use, but statistics show that these supplementary crops are on the present basis bringing in little or no additional income. Yields are too low. At the present market price our farmers are hardly paying actual expenses with these crops.

This condition could be remedied if we applied the same care and intelligence in



A Diversified Program

the handling of these crops that we are applying in the growing of our present main money crops. The improvement that can be made in these crops is strikingly shown by the improvement that our cotton farmers have made in the quality of their cotton crop and along with this improvement in quality a substantial increase in yields per acre.

This has been done:

1st: By selecting carefully their planting seed. "The quality of the crop can be no better than the seed we plant." Early maturing, thin foliated, quick fruiting quality cottons are being planted.

2nd: By proper preparation, fertilization, planting and cultivation.

3rd: By insect and disease control.

4th: By proper harvesting, preparation and marketing.

A WONDERFUL OPPORTUNITY

If similar points were emphasized and applied to our standard supplementary crops we would likewise succeed with them. We have a wonderful opportunity now as plant breeders have succeeded, after years of experimentation, in breeding highly productive, adapted oats that are cold

resistant, smut resistant, rust resistant, with excellent stiff straw, good grain characters and high feeding value; also, a highly productive, winter hardy, excellent tillering wheat that is mildew resistant and with considerable crown or leaf rust resistance. Seed of these new grains are now available and fit ideally into such a diversified program. Yields are such as to be remunerative and when properly handled will bring in good profits.

A READY HOME MARKET

We have a ready market for our surplus wheat right at home. We are only raising a fraction of the wheat that we consume.

If the rotation mentioned is followed we will have a big surplus of feed—oats, corn and hay. This will lead naturally to an increase in livestock, hogs, beef cattle, chickens and dairy cows. Our soils need the manure from such and our people need to consume more milk and beef. Brighter days are ahead when such a program becomes Southwide. We will live at home well and cheaply and our soils will be built up. No better heritage can we leave our children.



Coker's VICTORGRAIN OATS

The Best We Have Ever Bred in Our
32 Years of Small Grain Breeding

HISTORY OF BREEDING

In 1933, Victoria, a highly smut and rust resistant oat, but having no cold resistance and a heavy awn on first grain, was crossed on our cold resistant, early, highly productive Fulgrain, the object being to breed an oat that combined the rust resistance and extreme smut resistance of Victoria with the cold resistance, earliness, production and desirable grain characters of Fulgrain.



Above: Victorgrain was most outstanding in our first year test. Note excellent stooling and storm resistance as compared to check plot of other oat variety on right.

In the season of 1936 and 1937, over 11,000 head selections were in head-to-rows from such crosses. 600 of the most striking of these were saved and planted in cold, smut and yield tests in 1937 and 1938.

OUTSTANDING RECORD

Our breeders were particularly struck with the appearance of one of these selections. It was markedly superior to our Fulgrain Strain 2 check in cold resistance, tillering, apparent production, and storm resistance. When the test was threshed this strain showed a yield of 82.6 bushels whereas the adjacent check produced 72.5 bushels per acre. We were so struck with the promise of this strain that the seed were carefully stored in the vault of the Bank of Hartsville.

17½ LBS. SEED YIELDED 152 BUSHEL

In the fall of 1938, four acres were planted with 17½ pounds of seed which produced 152 bushels. A sample was sent to Dr. H. C. Murphy, Pathologist, U. S. D. A., Oat Investigations, at Ames, Iowa, for a determination of its rust resistance. He reported a 1 plus rating on all plants grown. The parent Victoria had a rating of 1. That year some seed were again planted in cold tests, and in Fulghum, Red Rust Proof and Fulgrain smut tests, also in yield tests. It again showed a remarkable yield record and to our delight proved to be resistant to all smuts.

Below: Showing excellent tillering and stiff straw of Victorgrain as compared with check variety on left.



WIDELY TESTED

In the fall of 1939 samples were sent to Dr. T. R. Stanton, in charge U. S. D. A., Oat Investigations, who included this strain in uniform rust and smut nurseries planted in every section of the United States. Samples were also sent to most cotton belt Experiment Stations for variety tests.

100 TO 1

We increased this 152 bushels on 285 acres the past season, sowing at the rate of $\frac{1}{2}$ bushel per acre and have been more than pleased with the outturn. One 17-acre field produced 74.3 bushels per acre, another field 72.1 bushels per acre and the average on the entire acreage was slightly in excess of 50 bushels, or an average of 100 bushels to every bushel planted.

ALMOST A PERFECT OAT

We are certain that it is the best oat that we have ever bred during our 32 years' experience in small grain breeding. It combines more good characters than any other Southern oat that we know of, namely: cold resistance, rust resistance, smut resistance, storm resistance, a beautiful grain and high yield—almost a perfect oat. In tests it has consistently led the best commercial varieties both in rust years and in years when there was no rust damage. We offer this oat in the assurance that it will help solve some of your diversification problems.

DESCRIPTION

Plant: Semi-procumbent (winter type) profuse tillering. Cold resistant—Rust resistant—Smut resistant—90% as tall as Fulgrain.

Season: Week later than Fulgrain.

Heads: Long, well balanced, heavily fruited, with bright yellow glumes.

Straw: Very stiff, very storm resistant. Ideal for combining.

Grains: Attractive, bright, resisting weather stain, plump, well-filled berry, low percent hull; heavy, weighing 39 lbs. per settled struck bushel; high feeding value.

Production: The best of any oat ever bred or offered by our Company.

PRICES: \$5.00 per bushel; \$4.75, 10 to 50 bushel lots; \$4.50 per bushel, 50 bushels and up.



Long, heavily fruited, well balanced heads are among Victorgrain's good characters.



Resistant to all smuts, including new race to which Fulgrain is susceptible. Fulgrain on left heavily infected. Victorgrain on right showing no infection.

Below: Dr. George J. Wilds, President and Director of Plant Breeding, and Mr. J. A. Henson, Secretary, of Coker's Pedigreed Seed Company, are pleased with the yield and quality of

this 17-acre field of Victorgrain oats. Planted with only one-half bushel seed per acre the average yield for this field was 74.3 bushels per acre.





A plant of Fulgrain Strain 4 rust, cold and smut resistant oats showing long heavy heads, profuse tillering and stiff straw.

Coker's FULGRAIN STRAIN

A Rust Resistant Fulgrain With

This is a new Fulgrain oat having the production of the former strains with the added characters of high crown rust resistance, high resistance to all races of smut including the new race to which former Fulgrain strains are susceptible. It is 2 to 3 days later, having the same general grain type with an occasional awn.

It is a stiff strawed, storm resistant, slightly shorter Fulgrain. The heads are heavy but long and well balanced, which characters coupled with its stiff straw give it marked storm resistance—an excellent oat for harvesting with a combine.

HEAVY EARLY GROWTH

This oat likewise originated from the cross Victoria x Fulgrain. It is typically Fulgrain. The early plant growth is striking with its dark green color and erect pointed blades. The glume color and grain color are likewise Fulgrain. The grains are somewhat shorter and plumper, very heavy, weighing 38 pounds per settled struck bushel and having very high feeding value.

Mr. Robert R. Coker, Vice-President, in charge of sales, pointing out to Messrs. Milton Weinstein and F. M. (Dutch) Barton, of the Russell-Heckle Seed Company, Memphis, Tenn., superior qualities of Fulgrain Strain 4. This field planted with one-half bushel seed per acre made an average yield of 65 bushels per acre.



4, RUST RESISTANT OATS

Added Smut and Storm Resistance

Fulgrain has earned a high rating among southern oat varieties. This new strain having rust resistance, extra smut resistance and storm resistance coupled with its high yield will still further increase its value to our southern agricultural program.

DESCRIPTION

Plant: Semi-erect with dark green pointed blades; profuse tillering, cold resistant, rust resistant, smut resistant; 85% as tall as Fulgrain.

Season: 2 to 3 days later than Fulgrain.

Heads: Long, well balanced, heavily fruited.

Straw: Very stiff, very storm resistant; ideal for combining.

Grains: Beautiful plump, slightly shorter Fulgrain; low percent hull; heavy, weighing 38 pounds per settled struck bushel; high feeding value.

Production: High.

PRICES: \$4.00 per bushel; \$3.75, 10 to 50 bushel lots; \$3.50 per bushel, 50 bushels and over.

Note remarkably stiff straw and storm resistance of Fulgrain Strain 4—third staked row from right—as compared with other varieties—
Photograph taken July 3rd.



Differences in earliness, stooling and smut resistance are shown here. Fulgrain Strain 4 on left, Victorgrain on right.





Long heads, well filled with plump, heavy grains.

Coker's HARDIRED WHEAT

BREEDING HISTORY

This is a distinct and very superior new variety. This wheat originated from a cross of Early Red May x (Hope x Hussar). At our request this cross was made in the spring of 1932 by Dr. C. O. Johnston, U. S. D. A., Wheat Investigations, at Manhattan, Kansas, and the hybrid seed sent to us that fall. The object in this cross was to breed a wheat that combined the yield and adaptability of the Red May with the mildew and rust resistance of Hope x Hussar. During the period 1934 through 1936 thousands of heads were selected, planted in head-to-rows, and the best selected from these and put back into head-to-rows each year. From 4000 such selections in head-to-rows in 1936 and 1937, 175 were selected for variety testing and increase.

14.2 LBS. SEED PRODUCED 64 BUSHEL

The following year, 1938, 27 of these were saved for increase and further testing. Coker 39-3 was by far the most outstanding of the 27. We were struck with its profuse tillering, excellent winter type, by its high mildew and early leaf

rust resistance; later by its long, well filled heads, its stiff straw and apparent high yield. We had 1.6 acres planted in this strain. This was sown with 14.2 lbs. of seed and produced 64 bushels of cleaned wheat or at the rate of 40 bushels per acre.

Showing storm resistance of Hardired wheat as compared with two sister strains.



A Superior New Variety

EVEN BETTER THAN REDHART

In test in 1939 it produced better than one-third more than our Redhart. We were so struck with this strain that it alone was increased. On 153 acres planted with this seed, we made a wonderful crop, averaging $33\frac{1}{3}$ bushels per acre. One field produced better than 40 bushels per acre. **HARDIRED** is superior to any variety of wheat that we have ever had to offer. Its winter hardiness, high production, mildew resistance and rust tolerance make it a valuable addition to our southern wheat varieties.



This 11-acre field of Hardired Wheat planted with one-third bushel per acre produced $419\frac{1}{2}$ bushels, an average of 38.14 bushels per acre.

DESCRIPTION

Plant: Winter type; profuse tillering, cold resistant, mildew resistant; high tolerance to leaf rust.

Season: Medium, week later than Redhart Strain 5. One to two weeks earlier than Leaps Prolific, Forward and Fulcaster.

Heads: Long, square, well filled.

Straw: Good, enabling ease of harvest with minimum loss.

Grains: Very similar to Redhart; high milling value.

Production: Highest.

PRICES: \$5.00 per bushel; \$4.75, 10 to 50 bushel lots; \$4.50 per bushel, 50 bushels and up.

SOLD OUT

This superior wheat combines high rust tolerance, mildew resistance, cold resistance, stiff straw and long heavy heads.





Above: Showing third generation segregation of Victoria x Fulgrain (Coker 33-19). Note differences in stooling and cold resistance.

On left: Dr. George J. Wilds making a cross of two oat varieties—first step in breeding a new variety to combine the good features of each parent and to eliminate weaknesses.



During seasons when rust damage is lacking, rust spores are brought in and inoculation artificially induced under specially constructed cages.



Rust infected leaves are soaked in water and this solution thoroughly sprayed on breeding selections. Later, a rust rating is given each.



Showing method of smut inoculation. Seed are dehulled, moistened and rolled in smut spores.



Photograph showing results of effective smut inoculation. Sister strains, 2 rows on right, resistant to all smuts. Fulgrain 4 and Victorgrain have such resistance.



Showing section of 22-acre small grain breeding plot containing over 36,000 test rows.



Section of a 1200 plant-to-row test of Fulgrain Strain 4 showing difference in earliness. The object of this test is to find new strains of Fulgrain of higher yield, earlier maturity, prettier grain and to maintain rust and smut resistance.



Illustrating method of oat variety testing. Five or six replications of each oat are planted in four-row plots on a uniform piece of soil, with identical rate of seeding, fertilizer and time of planting and two middle rows harvested for yield record. Two outside rows are guard rows.



Third year increase plots of possible new oat varieties. These half-acre blocks planted with approximately 8 pounds of seed in rows using a corn planter.



The reward of years of plant breeding effort—a superior new variety of Coker's pedigreed oats to add to the satisfaction and profits of Southern Agriculture.



Showing excellent production, long well balanced heads and stooling of Coker's Fulgrain oats.

Coker's **FULGRAIN Strain 3 OATS**

Coker's Fulgrain Strain 3 oat is an improvement over previous Fulgrain strains in uniformity and yield record. Although it has made only a slightly higher yield per acre than Fulgrain Strains 1 and 2 in our oat variety tests here for the past two years, it is the heaviest producing, most desirable Fulgrain we have previously offered. Its ability to make oats is shown by its yield of 93.6 bushels per acre in the 1939 Clemson College Oat Variety Test.

LEADS EXPERIMENT STATION TESTS

In addition to its excellent showing in our yield tests here, Fulgrain led the 1937 Clemson (S. C.) Oat Variety Test with a yield of 87.3 bushels per acre, against a yield of 64.6 for Red Rust Proof, 57.3 for Appller, and 58.4 for Fulghum. Fulgrain led the 1937 Pee Dee Experiment Station Test, Florence, S. C., and Delta Experiment Station Test, Stoneville, Miss., for an average of the years 1936-1937.

Fulgrain has a number of qualities—resistance to cold and smut, earliness, profuse stooling, heavy plump grain—which combine to make it a most desirable oat and its ability to make maximum yields of quality grain has been proven on thousands of southern farms.

DESCRIPTION

Grains: Plump, heavy, attractive golden color.

Season: Two weeks earlier than Appller and Red Rust Proof, 5 days ahead of Fulghum.

Cold Resistant: Has stood much lower temperatures than Red Rust Proof and Fulghum.

***Smut Resistant:** Although treated with smut during the period of its breeding and testing, it has shown less than one-half of one percent smutted heads.

Plant: Erect with broad leaves, excellent stooling and stiff straw.

Yield: Excellent.

PRICES: \$3.00 per bushel; \$2.75, 10 to 50 bushel lots; \$2.50 per bushel, 50 bushels and up.

***NOTE:** Fulgrain Strain 3 is highly smut resistant but since it was bred a new race of smut has been discovered to which all Fulgrain oats (except Fulgrain Strain 4) are susceptible.

This new smut has been found in **ONLY ONE LOCALITY** and the chances are it is not widely distributed. However, as a safeguard to our customers we are treating all Fulgrain Strain 3 seed offered with 2% Ceresan.

Coker's **REDHART Strain 5 WHEAT**

Redhart Strain 5 is our fourth improvement on the original Redhart strain of wheat first offered by our Company 19 years ago. It is very similar both in type and appearance to Redhart Strain 4 from which it came but has made a better yield record and has shown a higher degree of uniformity. It is a week earlier than Strain 1, from two to three weeks earlier than Forward, Leaps Prolific and Fulcaster, and a week earlier than Blue Stem and Gasta.

EXCELLENT STRAW

Redhart 5 has a strong stiff straw and stands up well under unfavorable weather conditions. The heads stand erect, are beardless and square with four full rows of grain. The glumes fit snugly over the grains and reduce loss from shattering.

DESCRIPTION

Plant: Erect in type, broad leafed, good stooling, 3" shorter than Strain 1.

Straw: Stiff, storm resistant.

Heads: Beardless, erect, square with 4 full rows of grain, cream to yellow glumes that fit snugly over grains, and reduce loss from shattering.

Yield: Best of the Redhart strains.

Season: Very early (a week earlier than Redhart Strain 1, escaping much rust injury).

Grains: Plump, horny, high gluten content, high milling value.

PRICES: \$3.00 per bushel; \$2.75, 10 to 50 bushel lots; \$2.50 per bushel, 50 bushels and up.

Mr. J. F. Clyburn, Farm Manager of Coker's Pedigreed Seed Company, photographed in field of Coker's Redhart wheat.



OUR VISITORS' PAGE



Visitors from Franklin County, North Carolina, inspecting smut test in section of our 22-acre grain breeding nursery.



Dr. George J. Wilds explaining oat breeding and testing to Dale Carnegie and George Eidson.



Dr. T. R. Stanton, Head of Oat Investigation, U. S. Dept. of Agriculture, and Dr. H. C. Murphy, Pathologist, U. S. Dept. of Agriculture, Oat Investigation, and Dr. Wilds inspecting increase field of new strain of wheat.



Visitors from Mississippi Delta appraising value of Coker's Victorgrain oats for Delta conditions.



Cherokee County, South Carolina, farmers, sizing up the merits of a new Coker oat.



Visitors from Cleveland County, North Carolina—one of North Carolina's leading cotton counties, are interested in improved wheat varieties.

FALL GRAIN PRICE LIST AND ORDER BLANK

1940 SEASON

Date _____ 194_____

Name _____

Address _____ R. F. D. No. _____
 or Street _____
 Address _____

Shipping Address _____ Shipping Date _____

SHIP BY FREIGHT () EXPRESS () PARCEL POST ()

NO. BUSHEL	VARIETY	PRICE PER BUSHEL			AMOUNT	
		1-10 BU.	10-50 BU.	ABOVE 50 BU.		
	Coker's Victorgrain Oats	\$5.00	\$4.75	\$4.50		
	Coker's Fulgrain Strain 4 (Rust Resistant)	4.00	3.75	3.50		
	Coker's Hardired Wheat	5.00	4.75	4.50		
	Coker's Fulgrain Strain 3 Oats	3.00	2.75	2.50		
	Coker's Redhart Strain 5 Wheat	3.00	2.75	2.50		
	Total					

All oats bagged in even weight four bushel bags; all wheat in two bushel bags. Prices F.O.B. Hartsville, S. C., and Memphis, Tenn. All shipments made direct from Hartsville.

COKER'S PEDIGREED SEED COMPANY
HARTSVILLE, S. C.

From.....

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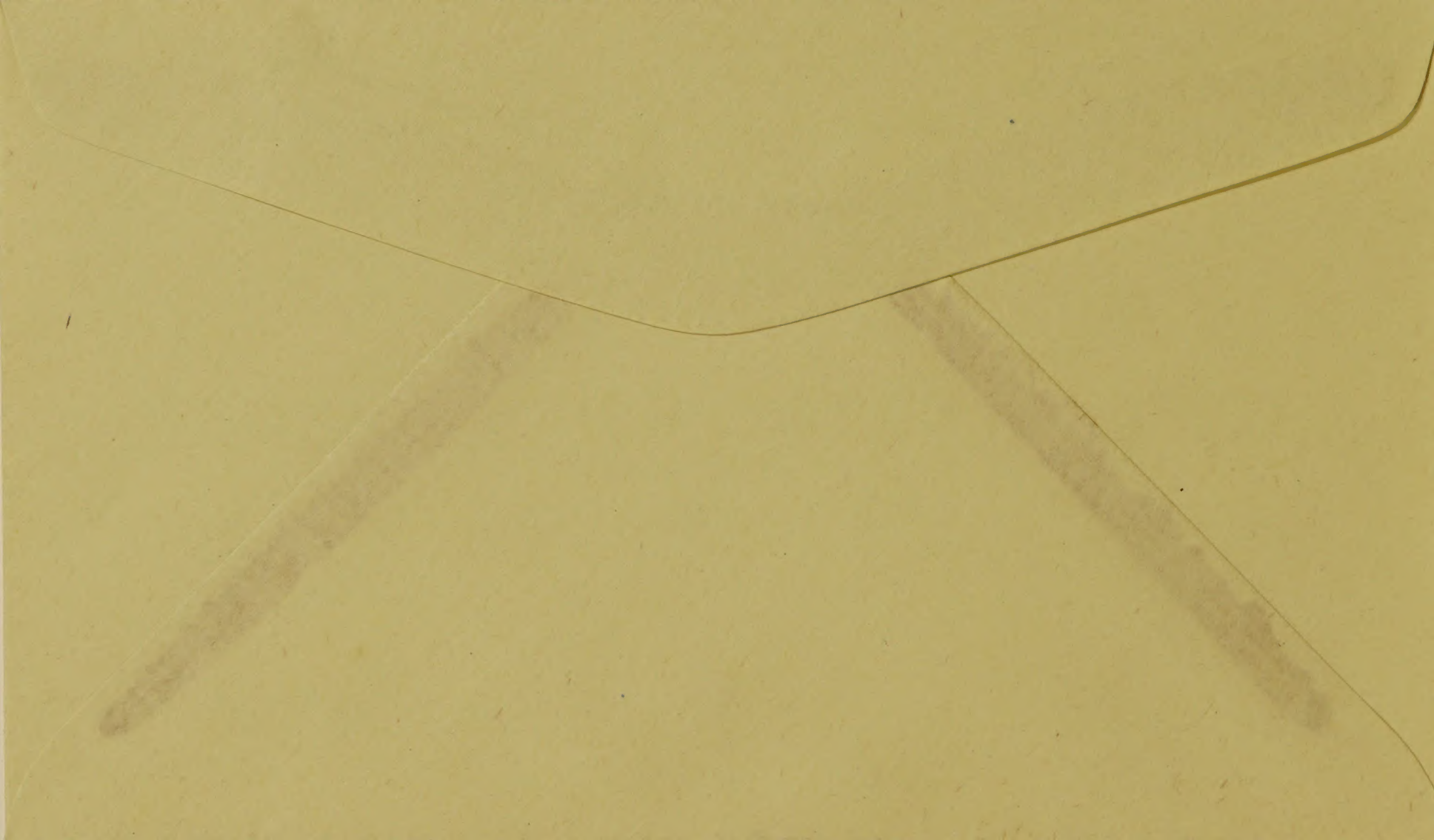
PUT
STAMP
HERE

COKER'S PEDIGREED SEED COMPANY

THE SOUTH'S FOREMOST SEED BREEDERS

DAVID R. COKER, President

HARTSVILLE, S. C.



BUSINESS TERMS

OUR RESPONSIBILITY: Our seed are all carefully tested for germination and purity before shipment. Attached to every bag of seed we ship is a card on which is printed the percentage of germination and mechanical purity of that particular lot of seed. Under no circumstances, however, can we be responsible for the germination of the seed after they have been planted for there are many reasons for imperfect germination of planted seeds other than their vitality. In no case, do we give any warranty expressed or implied as to the productivity or performance of our seed.

OUR CLAIMS: The claims we make for our seed are based on their actual performance in our breeding plots, variety tests and increase fields. They are ALL bred, grown, prepared, tested and stored under our personal supervision and control.

NO SEED BOUGHT: We do not buy seed for resale, either those grown from seed purchased from us or from any other source whatever. Our business is in originating, breeding, growing and selling superior varieties of field seed for the South. However, we are always glad to assist our customers in disposing of their surplus "first year from Coker" seed by referring inquiries to them whenever possible.

ONE PRICE POLICY: Our Company has, since its beginning, strictly adhered to the policy of selling its products on one schedule of prices to all. These prices are based on the quantity of the purchase and are published in our catalogs, price lists and pamphlets.

YOUR PROTECTION: Our seed are all sent out in bags labeled "COKER'S PEDIGREED SEED" and bearing our Registered Red Heart Trade Mark. Each bag also bears our O. K. tag and is officially sealed before leaving our warehouse. No seed is genuine "COKER'S PEDIGREED SEED" unless it bears our official O. K. TAG under seal and our Registered "TRADE MARK." Protect yourself by insisting upon having only seed bearing our official O. K. tag and Registered Trade Mark.

EFFECT OF GROWING CONDITIONS: Our descriptions are based on the actual records that our varieties have produced in our tests, and they will show the same characteristics elsewhere under the same conditions. Drought or POOR CONDITIONS will result in a reduced yield and poorer quality—no matter what variety is planted.

COKER'S PEDIGREED SEED COMPANY
HARTSVILLE, SOUTH CAROLINA

